209, B-16 Hostel
IIT Mandi - 175005
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Education

Mandi, India — **Indian Institute of Technology Mandi** — **Aug 2015 – Present**

- **Bachelor of Technology in Computer Science and Engineering, GPA: 7.41/10.0**
- **Relevant Coursework:** Data Structures and Algorithms, Operating Systems and Networking, System Architecture, Paradigms of Programming, Algorithm Design and Analysis, Database.
- **Teaching Assistant** for the courses Introduction to Programming, Algorithms and Data Structures, Networking and OS

Experience

Google Summer of Code, Developer — **GNU Octave** — **April – Aug 2018**

- Among the selected 3 out of 13, primary task was to incorporate APIs for uploading and publishing an Octave script with all figures generated through it using the user's credentials to Octave's website.
- Enhanced the software for performing CRUD operations on any RESTful web service.
- The project resulted in achieving easy file sharing between the website and software to distribute among the masses. RESTful Services were expanded to be **60% more compatible** with MATLAB, which is a crucial factor while validating any new functionality in the software.

Software Engineering Intern — **PocketPills** — **June – Aug 2018**

- Implemented an **Open Source** textWatcher class for Android with support for API level >= 16.
- Wrote **non-blocking** CRUD operations using **Java Ebean** ORM so that cross-platform queries won't need to wait.
- Implemented AWS Simple Email Service Client using Google **Guice DI** which could send out any errors on production or staging environment to the developer(s).
- Accomplished **100%** code coverage using **Mockito** and **Junit** Frameworks.

Projects

- **Peer-to-Peer File Sharing Application (in progress)**: Design and implement a file sharing application to enable file sharing via the college intranet using network coding and peer-to-peer protocol.
- **High School Portal**: Built a PHP-MySQL powered school management portal from ground up to deployment which aimed at helping the school administration and teachers communicate with students' parents and vice versa along with school reports, timetable, etc.
- **Optimal Wi-Fi Connector**: Improved the client side of a server-client based application in Python, by 30%, that could suggest the best possible connectivity to Wi-Fi devices in a large institution like a college, keeping network load uniform on all devices.
- **Preventing DoS attacks on Postgres API**: Modified the query parser stage of Postgres API to reject incoming repeated and expensive queries run by the database scheduler.
- **Automatic Junk Processor**: Developed a prototype that processed the input junk material using Arduino based sensors to put into different bins based on its type, i.e, plastic, landfill or metal.

Languages and Skills

- (Proficient): C, C++ (Familiar): Python, Java, JavaScript, MySQL, PHP , HTML, CSS
- Others: Git, Mercurial, LaTeX, Play MVC, Guice DI, Mockito, IntelliJ IDEA, Linux